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EXAMINER	
GANDHI, DIPAKKUMAR B	
ART UNIT	**PAPER NUMBER**
2133	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/084,880	LEWIS, NINA	
	Examiner	Art Unit	
	Dipakkumar Gandhi	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/31/03, 3/8/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 32 is objected to because of the following informalities: On page 74, line 2 of claim 32; period is missing at the end of the sentence. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by McNabb et al. (US 6,289,462 B1).

McNabb et al. anticipate claim 1.

McNabb et al. teach a method for managing user access information for access to one or more database network nodes, the method comprising: storing database user authorization in a central directory, the database user authorization comprising a user role; storing database user authentication information; locally defining the user role at a network node; receiving an access request from a user for the network node; authenticating the user based upon the database user authentication information; and granting the user privileges on the network node based upon the user role (col. 5, lines 20-30, lines 47-61, col. 6, lines 26-29, McNabb et al.).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 2-4, 10, 11, 12, 13, 14, 15, 16, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNabb et al. (US 6,289,462 B1) as applied to claim 1 above, and further in view of Ferguson et al. (US 2002/0082818 A1).

As per claim 2, McNabb et al. substantially teach the claimed invention described in claim 1 (as rejected above).

However McNabb et al. do not explicitly teach the specific use of an LDAP-compatible directory.

Ferguson et al. in an analogous art teach that this is accomplished by user authentication via a lightweight directory access protocol (LDAP) server that authenticates users within particular domain names that map to specific customer accounts (page 4, paragraph 41, Ferguson et al.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McNabb et al.'s patent with the teachings of Ferguson et al. by including an additional step of using an LDAP-compatible directory.

This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that using an LDAP-compatible directory would provide the opportunity to use a hierarchical structure for user authentication during login process.

- As per claim 3, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which the database user authentication information is stored at the central directory (page 4, paragraph 41, Ferguson et al.).

- As per claim 4, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which the database user authorization is stored in a schema having a hierarchy of schema objects (page 4, paragraph 41, Ferguson et al.).

- As per claim 10, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which the database user authorization is stored as one or more data objects in the central directory (page 4, paragraph 41, Ferguson et al.).

- As per claim 11, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which the one or more objects are stored in a security subtree in the central directory (figure 1, page 3, paragraph 36, Ferguson et al.).

- As per claim 12, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which administrative access is controlled to one or more data objects in the central directory (page 25, paragraph 196, Ferguson et al.)

- As per claim 13, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et.al. teach the method in which access control is implemented using an access control point associated with the one or more data objects in the central directory (page 19, paragraph 150, Ferguson et al.).

- As per claim 14, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which the access control point is associated with access policies for a subtree of the one or more database objects in the central directory (page 19, paragraph 145, Ferguson et al.).

- As per claim 15, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which the access control point is associated with access policies for a single entry for the one or more database objects in the central directory (page 19, paragraph 145, Ferguson et al.).

- As per claim 16, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which the access control point is associated with individually named users (page 18-19, paragraph 144-145, Ferguson et al.).

- As per claim 17, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which the access control point is associated with a group of users (page 18-19, paragraph 144-145, Ferguson et al.).

- As per claim 18, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the method in which members of the group are associated with a set of access privileges associated with the access control point (page 19, paragraph 145, 152, Ferguson et al.).

7. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNabb et al. (US 6,289,462 B1) and Ferguson et al. (US 2002/0082818 A1) as applied to claim 4 above, and further in view of Gavrila et al. (US 2002/0026592 A1).

As per claim 5, McNabb et al. and Ferguson et al. substantially teach the claimed invention described in claim 4 (as rejected above).

However McNabb et al. and Ferguson et al. do not explicitly teach the specific use of the method in which the hierarchy of schema objects comprises an enterprise role, wherein the enterprise role is associated with one or more users and one or more locally defined roles.

Gavrila et al. in an analogous art teach that this invention makes use, in yet a further aspect, of both local and global groups for the instantiation of roles on multiple computer hosts, to implement nested groups and to enable the integration of extant host computers, which include local user accounts and groups defined on independent servers and workstations, within large distributed operating systems (abstract, Gavrila et al.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McNabb et al.'s patent with the teachings of Gavrila et al by including an additional step of using the method in which the hierarchy of schema objects comprises an enterprise role, wherein the enterprise role is associated with one or more users and one or more locally defined roles.

This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that it would provide the opportunity to define a global role to associate the users with the authorization to access local databases.

- As per claim 6, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations.

Gavrila et al. teach that the privileges associated with the one or more locally defined roles are assigned to the one or more users (abstract, page 3, paragraph 22, Gavrila et al.).

- As per claim 7, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations. Gavrila et al. teach the method in which the hierarchy of schema objects comprises an enterprise domain, wherein the enterprise domain comprises one or more enterprise roles (page 2, paragraph 10, Gavrila et al.).

- As per claim 8, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations. Gavrila et al. teach the method in which each of the one or more enterprise roles is associated with one or more users and one or more locally defined roles (abstract, Gavrila et al.).

- As per claim 9, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations. Gavrila et al. teach the method in which the enterprise domain is associated with one or more network nodes (page 3, paragraph 22, Gavrila et al.).

8. Claims 19, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNabb et al. (US 6,289,462 B1) in view of Ferguson et al. (US 2002/0082818 A1).

As per claim 19, McNabb et al. teach a system for managing user access information for one or more database network nodes, comprising: one or more database network nodes for which user access is sought (col. 5, lines 31-33, col. 6, lines 24-29, McNabb et al.).

However McNabb et al. do not explicitly teach the specific use of an LDAP directory; and user access information data objects stored in the LDAP directory, the user access information data objects comprising authentication and authorization information.

Ferguson et al. in an analogous art teach that access determination information is stored by the access determination component 312, which is accessible by way of database 302. This is accomplished by using a hierarchical file structure in which specific access is determined and operated only to those users to whom it should be granted. This is accomplished by user authentication via a lightweight directory access protocol (LDAP) server that authenticates users within particular domain names that map to specific customer accounts (figure 3, page 4, paragraph 41, Ferguson et al.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McNabb et al.'s patent with the teachings of Ferguson et al. by including an additional step of using the LDAP directory; and user access information data objects stored in the LDAP directory, the user access information data objects comprising authentication and authorization information. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that using an LDAP-compatible directory would provide the opportunity to use a hierarchical structure for user authentication during login process.

- As per claim 26, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the user access information data objects comprise an access control point attribute (page 18-19, paragraph 144-145, Ferguson et al.).

- As per claim 27, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the access control point attribute is established only if access control policies are established for a corresponding object (page 19, paragraph 145, Ferguson et al.).

- As per claim 28, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the access control point attribute is associated with access policies for a subtree in the user access information data objects stored in the LDAP directory (page 19, paragraph 145, Ferguson et al.).

- As per claim 29, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the access control point attribute is associated with access policies for a single entry in the user access information data objects stored in the LDAP directory (page 19, paragraph 145, Ferguson et al.).

- As per claim 30, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the access control point attribute is associated with individually named users (page 18-19, paragraph 144-145, Ferguson et al.).

- As per claim 31, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the access control point attribute is associated with a group of users (page 18-19, paragraph 144-145, Ferguson et al.).

- As per claim 32, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which members of the group are associated with a set of access privileges associated with the access control (page 18-19, paragraph 144-145, Ferguson et al.).

- As per claim 33, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the user access information data objects comprise a mapping object that maps a database user to a database schema (page 4, paragraph 41, Ferguson et al.).

- As per claim 34, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the mapping object affects a single user (page 4, paragraph 41, Ferguson et al.).

- As per claim 35, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the mapping object is associated with a full distinguished name (page 4, paragraph 41, Ferguson et al.).

- As per claim 36, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the mapping object is associated with a plurality of users (page 4, paragraph 41, Ferguson et al.).

- As per claim 37, McNabb et al. and Ferguson et al. teach the additional limitations.

Ferguson et al. teach the system in which the mapping object is associated with a partial distinguished name (page 4, paragraph 41, Ferguson et al.).

9. Claims 20-25, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNabb et al. (US 6,289,462 B1) and Ferguson et al. (US 2002/0082818 A1) as applied to claim 19 above, and further in view of Gavrila et al. (US 2002/0026592 A1).

As per claim 20, McNabb et al. and Ferguson et al. substantially teach the claimed invention described in claim 19 (as rejected above).

However McNabb et al. and Ferguson et al. do not explicitly teach the specific use of the system in which the user access information data objects comprise a domain object that is associated with the one or more database network nodes.

Gavrila et al. in an analogous art teach that a selected group of host computers compose a domain. One can define a user or group global with respect to a domain, in the sense that the group is recognized by each of the domain's member hosts (page 8, paragraph 98-99, Gavrila et al.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McNabb et al.'s patent with the teachings of Gavrila et al. by including an additional step of using the system in which the user access information data objects comprise a domain object that is associated with the one or more database network nodes.

This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that using the system in which the user access information data objects comprise a domain object that is associated with the one or more database network nodes would provide the opportunity to recognize the user or a group by the members of the domain.

- As per claim 21, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations.

Gavrila et al. teach the system in which the domain object is associated with an enterprise role (page 8, paragraph 99, Gavrila et al.).

- As per claim 22, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations.

Gavrila et al. teach the system in which the enterprise role is associated with a local database role (abstract, Gavrila et al.).

Ferguson et al. teach database (page 4, paragraph 41, Ferguson et al.).

- As per claim 23, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations.

Gavrila et al. teach the system in which the scope of the local database role is locally defined at a local database network node (page 3, paragraph 22, Gavrila et al.).

Ferguson et al. teach database (page 4, paragraph 41, Ferguson et al.).

- As per claim 24, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations.

Gavrila et al. teach the system in which the enterprise role is associated with one more users (page 3, paragraph 22, Gavrila et al.).

- As per claim 25, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations. Gavrila et al. teach the system in which each of the one or more users is associated with privileges defined for the enterprise role (abstract, page 3, paragraph 22, Gavrila et al.).

- As per claim 38, McNabb et al., Ferguson et al. and Gavrila et al. teach the additional limitations. Gavrila et al. teach the system in which the enterprise role is associated with local database roles from a plurality of database nodes (abstract, Gavrila et al.).

10. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over McNabb et al. (US 6,289,462 B1) in view of Gavrila et al. (US 2002/0026592 A1).

As per claim 39, McNabb et al. teaches a process for managing user access information for database network nodes, the process comprising: storing database user authorization in a central directory, the database user authorization comprising a user role; storing database user authentication information; locally defining the user role at a network node; receiving an access request from a user for the network node; authenticating the user based upon the database user authentication information; and granting the user privileges on the network node based upon the user role (col. 5, lines 20-30, lines 47-61, col. 6, lines 26-29, McNabb et al.).

However McNabb et al. do not explicitly teach the specific use of a computer program product that includes a medium usable by a processor, the medium having stored thereon a sequence of instructions that can be executed by said processor.

Gavrila et al. in an analogous art teach a computer program product containing computer readable code for causing a machine to perform the method (page 19, claim 22, Gavrila et al.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McNabb et al.'s patent with the teachings of Gavrila et al. by including an additional step of using a computer program product that includes a medium usable by a processor, the medium having stored thereon a sequence of instructions that can be executed by said processor.

This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that using a computer program product that includes a medium usable by a processor, the medium having stored thereon a sequence of instructions that can be executed by said processor would provide the opportunity to execute the process faster and accurately.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dipakkumar Gandhi whose telephone number is 703-305-7853. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dipakkumar Gandhi
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